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## **ABSTRACT**

Mass media portrayals of unsafe, irresponsible outdoor activities encourage many people using national parks, forests, wilderness areas, and other public lands to exhibit little concern about environmental responsibility, safety, and the rights of other people. Such behavior threatens natural resources and the opportunity for others to enjoy them in the future, and results in unnecessary injuries, rescue missions, and emergency medical services. Education campaigns such as the highly successful Smokey the Bear campaign have resulted in various information and education programs for mitigating visitor-related management problems. Brochures are relatively inexpensive and are widely used. Recently, the National Outdoor Leadership School, the National Park Service, the USDA Forest Service, the Bureau of Land Management, and the U.S. Fish and Wildlife Service cooperated to produce a new series of publications on the theme of "Leave No Trace." These are particularly effective because they provide regional and park-specific information about minimum impact practices. The effectiveness of publications can be improved when combined with a personal contact. Exhibits and displays can present complex detailed information, and if agency personnel are present, questions can be answered and supplemental information can be distributed. Direct communication from agency personnel is one of the most influential, and expensive, media. Videotapes are receiving increased use, and the Internet has tremendous potential for providing responsible information. Eight principles of effective wilderness education are presented. Contains 18 references. (TD)

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## What Is the Message in the Medium? Mixed Signals for National Park and Wilderness Users

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

For years variegated experts and assorted scolds have been warning us that our natural areas are in danger of being, as the cliche puts it, "loved to death." To be sure, human visitation in national parks, forests, wilderness areas, and other assorted public lands has multiplied dramatically during the past two decades. It is true that many of our natural areas show evidence of overuse and careless or irresponsible treatment that threatens the resources as well as the opportunity for our descendants to enjoy them in the future. It is also true that many people are injured and a lot of money and effort expended on search and rescue missions and emergency medical services as the result of irresponsible visitor behavior.

Most experienced and regular users are familiar with the proper rules and procedures to be followed in order to protect the resources and recreate responsibly. Backpackers generally are familiar with the tenets of minimum impact or no trace camping. Snowmobilers and dirt bikers realize that they should leave marked trails only in designated areas. Rafters, kayakers, and canoeists understand that they should not introduce pollutants into the waters. Experienced climbers are keenly aware of the importance of safety procedures and environmental responsibility.

The steady user of outdoor areas is likely to be interested enough in the resources to consume safety and environmental information from a variety of responsible sources, including government brochures and publications, as well as popular books and magazines such as <u>Backpacker</u>, <u>Outside</u>, <u>Snow Country</u>, or others among the multitudinous publications devoted to outdoor activities. Many also belong to environmental or activity organizations such as the Sierra Club, the National Parks and Conservation Association, the Mountaineers, and others too numerous to mention. Certainly there are some experienced outdoor enthusiasts who act irresponsibly, but we believe that the greater threat is posed by the occasional and/or inexperienced user.

The inexperienced or occasional user is frequently a person who is lured into the wilderness, onto the rocks, into the rivers, not by the responsible messengers, but often by dramatic, flamboyant, and misleading visual or verbal images that can contribute to personal and environmental disaster. We have all seen ridiculously dangerous or horribly irresponsible



outdoor activities portrayed in movies and on television, often with the smugly intoned message that "these people are professionals" and we should "not try this at home." But if the "professionals" seen by the novice on the screen are acting irresponsibly, why should he or she not aspire to do the same?

Popular magazines, even in some cases publications which are very responsible in their editorial policies, are replete with advertisements and other images which present messages, sometimes direct, often subliminal, which are jarringly at odds with the "politically and environmentally" correct safety and environmental principles which all responsible outdoor administrators and users supposedly favor. Let us cite a few examples.

A Bureau of Land Management and United State Forest Service brochure entitled "Tread Lightly! On Public And Private Land" introduces a "National Land Use Ethics Program" which offers good advice to four wheelers, snowmobilers, trail bikers, horseback riders and others. "Avoid running over young trees, shrubs, and grasses-- damaging or killing them." "Stay off soft, wet roads and trails readily torn up." "Avoid meadows, steep hillsides, stream banks and lake shores easily scarred by churning wheels." "Ford streams only at designated crossings." "Resist the urge to pioneer a new road or trail, or to cut across a switch back." "Stay out of designated wilderness." "Thumbs down on sound! Loud noise in the back country is unacceptable." "Know your own limitations." "Carry emergency repair equipment as well as food and warm clothes." "Wear protective gear and safety clothes."

Sound advice. But what do we find in the popular publications? In <u>Backpacker</u> a Geo Tracker pulled to the very edge of a high country lake, with the message that "Out here, all you need to do...is have fun."<sup>2</sup> Or perhaps you'd like to pull your Chevrolet Tahoe onto some soft ground deep in a pine forest and quote a little Thoreau: "I never found the companion that was so companionable as solitude." "Chevy Tahoe is "the one sport utility vehicle whose vast size and comfort make it perfect for self-discovery," says the ad.<sup>3</sup> Or how about "The Answering Machine For The Call Of The Wild." A Toyota 4Runner is "able to handle almost anything nature may throw at you."<sup>4</sup> Your

<sup>&</sup>lt;sup>4</sup> <u>Ibid</u>., p. 77.



<sup>1 &</sup>quot;Tread Lightly! On Public And Private Land: A National Land Use Ethics Program" (Undated booklet published by the United States Forest Service and the Bureau of Land Management).

<sup>&</sup>lt;sup>2</sup>Backpacker, Sept. 1996, p. 51.

<sup>3</sup> Sports Illustrated, Oct. 28, 1996, p. 86.

friends at Honda tell you that "If you say it's a road, it's a road," as a Passport furiously churns up mud. However, in very small print at the bottom of the page is the admonition to "Always remember to 'Tread Lightly!'" Which message do you suppose registers with the average reader? If, in fact, burying a truck in the mud is your thing, Isuzu and Honda, among others, are proudly here to help you. And, by the way, how in the hell <u>did</u> they get that Jeep Cherokee up on top of that tall and tiny mesa top? Remember, they are professionals—don't try this at home!

Remember that advice about dressing appropriately for comfort and safety when backpacking? Forget it. "Get Outrageous...It's Only Natural" says an advertisement for Outrageous Fruit & Grains in Backpacker. The ad features a handsome couple with full packs hiking a Capella, possibly in the Garden of Eden. 7 At the other end of the spectrum, how about a little canoe trip, ala Martha Stewart? A lucky lady from Florida "found help at her supermarket checkout counter," says an advertisement for Rodale Press. She tells us that Rodale's <u>Prevention</u> magazine is the key: "I believe being healthy should be a reward, not punishment. So does Prevention. encourage fun exercise and fat-free foods. So my husband...bought me something I always wanted -- a canoe. Now we both stay fit with two paddles and a picnic basket filled with delectable food." Is this the outdoors or A canoe, a checkered table cloth, a bottle of sparkling water, and two people who look like they are more accustomed to the Presidential suite at the Waldorf than the business end of a paddle.8 Are you ready for a little more adventure in a canoe? The Disney Institute shows you a group of intrepid paddlers in a swamp, with the notation that "Coming face to face with the alligator at the swamp party, Jane was reminded to make a facial appointment Ah, wilderness! at the spa."9

And what about those safety messages? Boreal boots boasts "No rules, no regulations, no qualifying rounds, no teams, no uniforms, no trophies, no spectators. Just you (and some boots)." We would add and "no rope" as the advertisement presents a photograph of a climber clinging to a high rock outcropping, without visible evidence of dedication to safety or prudence. 10 And an extreme skier featured in a Marmot Mountain catalog crows that "Skiing

<sup>10</sup> Rock & Ice, May/June, 1995, p.146.



<sup>5</sup> Backpacker, September, 1996, p. 119.

<sup>6</sup> Backpacker, December, 1996, pp. 1-2; Backpacker, August, 1993, p., 89.

<sup>7</sup> Backpacker, September, 1996, p. 133.

<sup>8</sup> Backpacker, December, 1993, p. 26.

<sup>9</sup> The New Yorker, Oct. 21 & 28, 1996, p. 113.

on lifts is just training for the real thing," and describes a trip down "Alaska's Mt. XXX (name withheld to protect the foolish)."11 Consider the fact that in 1994, rangers at Yosemite National Park performed 231 visitor rescues.12 Averaged over one year this is more than one rescue every other day!

when you look at advertisements of this type, as well as the images presented in popular movies, television programs, videos, magazines and other sources, is it any wonder that many people, particularly novices, go to the outdoors with outlandish ideas about what they will see and do and experience? Is it any wonder that (discarding for the moment the idea of simple common sense and courtesy) many of them exhibit little concern about environmental responsibility, safety, and the rights of other people. In a sense, the job of the National Park Service and other agencies which try to teach people to act responsibly in the outdoors and in wilderness is more than simply starting from scratch. They have the extremely difficult task of trying to overcome or eradicate mountains of erroneous and irresponsible ideas which have been drummed into people's brains over the years by many messages, both open and subliminal. What are the most effective mediums for driving the right messages home? We will examine some of the more effective efforts along with possible reasons for their success.

Information and education has been a management tool utilized by park and wilderness managers for decades. During World War II, fearful that Japanese attacks on the west coast might start forest fires and depelete needed natural resources, the USDA Forest Service organized the Cooperative Forest Fire Prevention Campaign. Early campaign posters featured a wide variety of characters including Walt Disney's Bambi. However it was later decided that the Forest Service needed its own animal to represent forest fire prevention. The first poster depicted Smokey, named after the Assistant New York City Fire Chief "Smokey Joe Martin", pouring water on a campfire. Since that time the Advertising Council continued to use the Smokey campaign and in 1947 implemented the famous slogan "Remember, only YOU can prevent forest fires." A recent survey reported that ninety five percent of the public could finish the slogan when given the first few words and that ninety eight percent of the

<sup>11 &</sup>quot;Marmot For Life" (Marmot Mountain Ltd. catalog, Fall, 1996), pp. 16-17. 12 PARKNET: The National Park Service Place on the Web. World Wide Web address: http://www.nps.gov/



public could identify Smokey from a picture. 13 Few information campaigns have been so effective and as a result many managers began to look at information and education as a means of mitigating visitor related management problems.

The brochure has been called by some a panacea for all visitor related management problems. Most agencies can identify instances where brochures have been effective and also where they have not. Usually produced in response to public demand or a problem, brochures are most appropriate for tasks associated with educating the public rather than attempts to change public attitudes. Effective brochures typically utilize clear, concise messages, are of a size that is easily carried while in the park, and use graphics where appropriate. Brochures are relatively inexpensive compared with other communication media but the message can be lost if the brochure is too cluttered or if the visitor picks up too many different brochures.14 Recently, the National Outdoor Leadership School along with the National Park Service, the USDA Forest Service, the Bureau of Land Management and the U.S. Fish and Wildlife Service cooperated to produce a new series of publications on the theme of "Leave No Trace." The general tenets of this program include: (1) Plan Ahead and Prepare, (2) Camp and Travel on Durable Surfaces, (3) Pack It In, Pack It Out, (4) Properly Dispose of What You Can't Pack Out, (5) Leave What You Find, and (6) Minimize Use and Impacts of Fire. These publications have received wide acclaim particularly because they have been adapted to provide regional and even park specific information about minimum impact practices.15

The value of park/area specific information should not be underestimated. For example, staff at Rocky Mountain National Park were observing numerous problems associated with cyclists traveling up Trail Ridge Road. A relatively simple brochure advised cyclists to start early to avoid traffic congestion and fumes from automobiles and to change into dry clothing prior to reaching

<sup>&</sup>lt;sup>15</sup> Marion, Jeffrey L. and Brame, Susan C. (1996). "Leave No Trace - Outdoor Skills and Ethics: An Educational Solution for Reducing Visitor Impacts."

<u>Park Science</u>, <u>16(3)</u>, pp. 24 - 26.



<sup>13</sup> Fazio, James R. and Gilbert, Douglas. (1981). <u>Public Relations and Communications for Natural Resource Managers</u>. Dubuque, ID: Kedall/Hunt. p.104.

<sup>14</sup> Doucett, Joseph E. and Cole, David N. (1993). <u>Wilderness Visitor Education</u>: <u>Information About Alternative Techniques</u>. Ogden, UT: Intermountain Research Station, USDA Forest Service. p. 10.

timberline in order to reduce the chances of succumbing to hypothermia.16

Finally, it should be noted that the effectiveness of publications can be improved when combined with a personal contact. Many educational programs are facilitating this practice when designing publications. Several agencies that promote the "Tread Lightly" program for off road vehicles are publishing supplemental materials to be used in conjunction with presentations by agency personnel in general science classes in grade and middle schools as well as in hunter education courses.<sup>17</sup>

Exhibits and displays have been used infrequently by most agencies except for the National Park Service. As a communication medium, exhibits and displays have several advantages. Complex information can be communicated fairly easily. This would seem to be particularly advantageous for presenting detailed information about backcountry impacts and techniques for reducing the effects of backcountry recreation. If agency personnel are present, visitor questions can be answered and supplemental information in the form of brochures and maps can be distributed. Perhaps the main advantage of this medium is that information may be presented before the visitor enters the backcountry. The major disadvantage of this method is that many users do not enter visitor centers prior to their backcountry trips and as such the information presented may come too late to be of use.18

Communication from agency personnel has been identified as one of the most influential communication media available to resource managers. Most agency personnel and particularly those in the backcountry are perceived as highly knowledgeable and credible. Employees making visitor contacts should be trained to be friendly, knowledgeable, and sensitive to visitor needs. In addition, those involved in enforcing backcountry regulations should be low-key and avoid self-righteous attitudes. Many managers believe this to be one of the most effective techniques of dealing with visitor related problems. The major disadvantage of this form of communication is the high cost per visitor contact.<sup>19</sup>

Within recent years, the use of video technology has received increased attention. "Videos can be entirely produced in-house or the basic concepts

<sup>19</sup> lbid. p. 25.



<sup>16 &</sup>quot;Bicycling in Rocky Mountain National Park. (Undated brochure published by the National Park Service).

<sup>17</sup> USDA Forest Service (1990). <u>Tread Lightly! Science Education Instructor's Kit</u> and <u>Tread Lightly! Hunter Education Instructor's Supplement</u>.

<sup>18</sup> Doucette and Cole. (1993). p. 16.

can be developed in-house with commercial production."20 Videos are familiar to most people and have the potential of being entertaining. Some managers believe that videos can be particularly effective in reducing problems with trail and campsite deterioration, pack stock impact, and human waste disposal. If planning to utilize videos for on-site visitor education prior to backcountry trips, consider limiting the length of the video to 5 to 10 minutes. Most visitors ready to hit the trail are reluctant to view videos that last much longer. As with many other communication media, videos may not reach most visitors and may miss target audiences, however, some agencies have experimented with providing videos to rental outlets for free distribution to consumers as a means of reaching a larger audience.

Computers have been utilized by agencies for 10 to 15 years to provide visitors with information about backcountry use. But it has only been in the last few years that the general population has turned to the computer to obtain information on a wide variety of topics on a daily basis. Who hasn't heard of the Internet yet? Most anyone who reads popular magazines, listens to the evening news, or watches sports on cable TV has been told how they can communicate via computer by typing in a cryptic message that sounds something like "www dot something or other dot com". But just what is the Internet and what are the implications for educating backcountry recreationists? The Internet is really nothing more than an enormous group of computers (3.5 million computers and 40,0000 networks at last count!) connected to one another that allows individuals to share information and to send and receive messages. One of the hottest services on the Internet in recent years is the World Wide Web or www or the web for short. The Web provides users with interactive and inter linked documents that allows users to send and receive text, images, sounds and even video. Within recent months the number of agencies and organizations providing information about outdoor activities has grown rapidly. Internet users can obtain information on almost any outdoor activity imaginable. Information about climbing, skiing, backpacking, horseback riding, fly fishing, canoeing/kayaking, almost any activity is available on the Web. Destinations and equipment topics proliferate these sites, however, a close examination has revealed an almost total omission of information related to safety and minimum impact issues. Several notable exceptions include the National Outdoor Leadership School's site (http://www.nols.edu/LNT/LNTHome) and <a href="magazine's site">Backpacker</a> magazine's site (http://www.bpbasecamp.com.) for information about no trace techniques and the

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<sup>20 &</sup>lt;u>Ibid</u>. p. 17.

American Alpine Club's web page (http://www.bme.jhu.edu/~peter/climbing/ANAM95/ANAM.html) for information about climbing safety. The internet has tremendous potential for educating backcountry recreationists. With many people "surfing the net" for information in lieu of other sources, it seems imperative that more information about safety and protection of the environment be made available on sites dedicated to outdoor recreation activities.

Recently, the National Park Service has proposed the development of a new computer application for park visitors. Due to shortages of personnel and overcrowded conditions, staff at Grand Canyon National Park have envisioned a "cyber ranger". Called the "Canyon Companion - Virtual Ranger" the proposal calls for the development of a small hand held, solar powered, personal, portable multimedia electronic display and communications device. computer would be weatherproof, wireless and interactive and would provide information in the language and of the kind and depth required by each user. Such a device would help displace fixed interpretive and logistical facilities, could ask questions, register responses, provide information on destinations, offer weather forecasts, interpret features and help plan a day's activities. As the staff imagines it, the computer would be secured with a credit card procedure similar to that of a car rental. In addition, electronics would render the device useless outside of the park's boundaries and thus help deter theft.21 While such a device might sound decades away from development, most people could not have imagined the Internet ten or fifteen years ago.

In summary, what message is in the medium? Do we too often assume that everyone is familiar with the issues surrounding outdoor recreation safety and protection of the environment? What effect is the popular media having on visitors' perceptions of what activities are appropriate in backcountry areas? Doucette and Cole suggested eight principles of effective wilderness education that might improve the situation in backcountry areas:22

1. Educational Programs Should Be Guided by Specific Objectives. We should focus on specific problems and target the users that are the primary cause of the problems. Of particular importance are issues related to visitor safety and protection of natural resources. Park and recreation areas can ill afford to spend precious funds

<sup>22</sup> Doucette and Cole (1993). pp. 29-30.



<sup>21</sup> National Park Service. (1995). The Sustainable Grand Canyon Workshop. Denver: NPS Denver Service Center.

on frivolous rescues necessitated by ignorant and sometimes arrogant visitors.

- 2. Messages Should Be Clear, Concise and Consistent. When more than one medium is used, it is important that the messages be consistent in order to avoid confusion.
- 3. The Timing of Educational Messages Is
  Important. Messages need to be sent when prospective
  visitors are planning their trips. Computer technology
  could greatly aid in this endeavor.
- 4. A Combination of Techniques Is Likely To Be
  Most Effective. This allows for messages to be repeated
  and for more visitors to be contacted.
- 5. Messages Should Be Presented in a Professional Manner. Productions do not have to be slick, but they must not look amateurish or credibility may be lost.
- 6. Personnel Must Be Personable and Well Trained.
  Personnel should be trained in communication skills and the techniques of low impact recreation. They should have a personal knowledge of the area and of wilderness travel.
- 7. Personnel Must Be Committed. Agency personnel must believe in the value of preserving wilderness and the importance of education.
- 8. Develop Creative Ways of Educating Visitors.

  Look for new techniques to reach more people and to save more money. When possible, take advantage of new media.

In addition, concerned outdoor recreationists should not hesitate to contact companies and organizations whose advertisements and communications seem to transmit messages contrary to the tenets of safety and no trace ethics.

If education about safety and no trace techniques is overlooked in the future, what are the prospects? Probably increased regulation, concentration of use to a few hardened sites, closure of sites, and the implementation of fees and charges for backcountry use just to name a few. Managers, outdoor leaders and participants all have responsibilities to educate others so that future generations may enjoy wilderness areas without the problems associated with overuse and over regulation.



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